



SURFACE MOUNT BRIDGE

**DB101S THRU DB107S
DF005S THRU DB10S**

VOLTAGE RANGE

50 to 1000 Volts

CURRENT

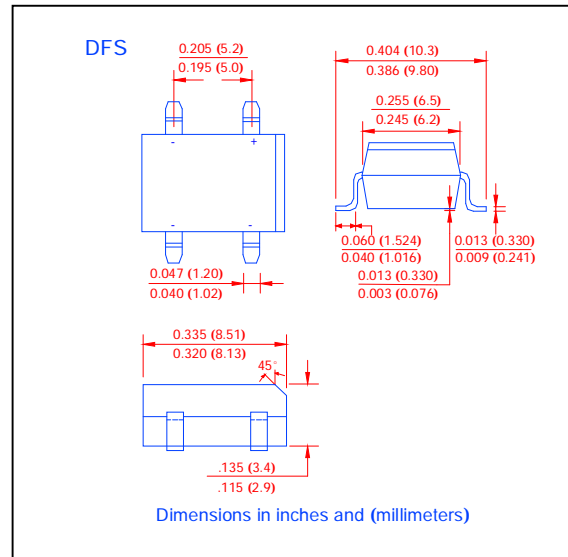
1.0 Ampere

FEATURES

- Glass passivated chip junction
- Ideal for surface mounted applications
- Low leakage
- High forward surge current capability
- High temperature soldering guaranteed:
260°C/10 seconds at terminals

MECHANICAL DATA

- Case: Molded plastic body
- Epoxy: UL94V-0 rate flame retardant
- Polarity: Molded on body
- LeadP: Plated terminals solderable per MIL-STD-202E method 208C
- Weight: 0.04 ounce, 1.0 gram



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

- Ratings at 25°C ambient temperature unless otherwise specified
- Single Phase, half wave, 60Hz, resistive or inductive load
- For capacitive load derate current by 20%

	SYMBOLS	DB101S DF005S	DB102S DF01S	DB103S DF02S	DB104S DF04S	DB105S DF06S	DB106S DF08S	DB107S DF10S	UNIT	
Maximum Reverse Peak Repetitive Voltage	V_{RRM}	50	100	200	400	600	800	1000	Volts	
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	Volts	
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	Volts	
Maximum Average Forward Rectified Output Current, 0.06”(1.5mm) lead length at $T_A=40^\circ\text{C}$ (Note 2)	$I_{(AV)}$	1.0							Amps	
Peak Forward Surge Current 8.3ms single half sine wave superimposed on rated load (JEDEC Method)	I_{FSM}	50							Amps	
Rating for Fusing ($t < 8.3\text{ms}$)	I^2t	10							A^2s	
Maximum Instantaneous Forward Voltage drop Per Bridge element 1.0A	V_F	1.1							Volts	
Maximum Reverse Current at rated DC blocking voltage per element	$T_A=25^\circ\text{C}$	I_R							5	μAmps
	$T_A=125^\circ\text{C}$								0.5	mAmps
Typical Junction Capacitance (NOTE 1)	C_J	25							$^\circ\text{C}/\text{W}$	
Typical Thermal Resistance (NOTE 2)	$R_{\theta JA}$	40							V_{AC}	
Operating and Storage Temperature Range	T_J, T_{STG}	(-55 to +150)							$^\circ\text{C}$	

- Notes:**
1. Measured at 1.0MHz and applied reverse voltage of 4.0 Volts.
 2. Unit mounted on P.C.B. with 0.51”x0.51” (13x13mm) copper pads.



SURFACE MOUNT BRIDGE

DB101S THRU DB107S
DF005S THRU DB10S

VOLTAGE RANGE

50 to 1000 Volts

CURRENT

1.0 Ampere

RATINGS AND CHARACTERISTIC CURVES DF005S THRU DB107S

FIG. 1- DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

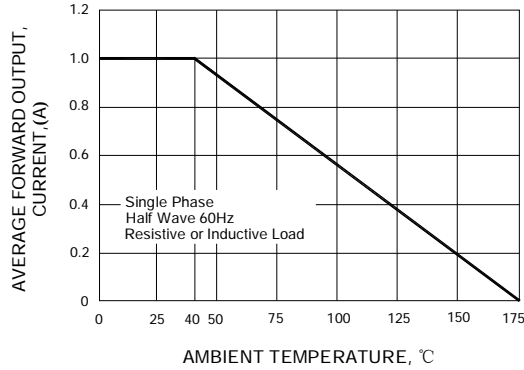


FIG. 2- MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER ELEMENT

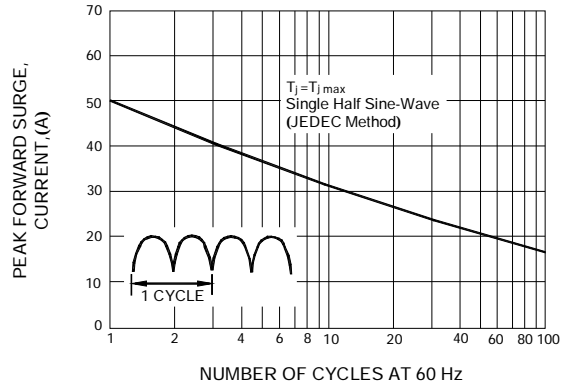


FIG. 3- TYPICAL FORWARD CHARACTERISTICS PER BRIDGE ELEMENT

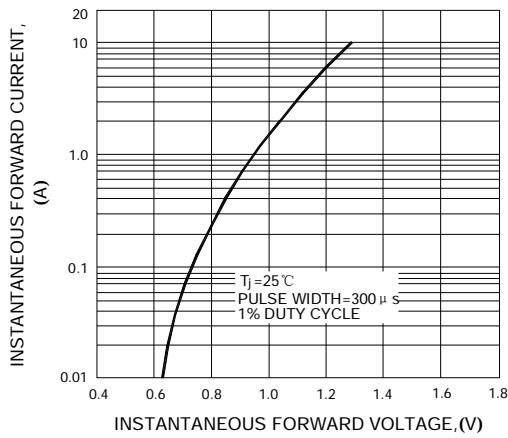


FIG. 4- TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT

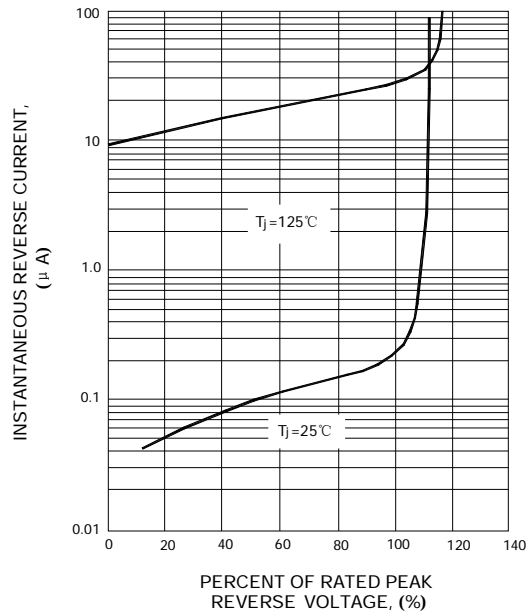


FIG. 5- TYPICAL JUNCTION CAPACITANCE PER BRIDGE ELEMENT

